

### Claims

1. A method of qualitative or quantitative assay of collagen type II or fragments thereof in a biological sample comprising contacting said fragments with an immunological binding partner which is immunoreactive with an epitope comprised in the amino acid sequence HRGYPGLDG and detecting resulting immunoreaction.
2. A method as claimed in claim 1, wherein said epitope consists of five or more amino acids in said sequence.
3. A method as claimed in claim 1 or claim 2, wherein said immunological binding partner is reactive with said epitope in the context of unwound collagen type II or fragments thereof but not in the context of the wound form of collagen type II.
4. A method as claimed in any preceding claim, wherein the detected immunoreaction is between said immunological binding partner and collagen type II fragments of less than 80kDa.
5. A method as claimed in claim 4, wherein said fragments are of less than 30kDa.
6. A method as claimed in claim 4, wherein said fragments are of less than 10kDa.
7. A method as claimed in any preceding claim, wherein said sample is a biological fluid.

8. A method as claimed in claim 7, wherein said biological fluid is serum, urine, tear fluid, synovial fluid, subcutaneous interstitial fluid, a cell culture supernatant fluid, or a cell extract.
9. A method as claimed in any preceding claim, wherein said detected immunoreaction is indicative of degradation of cartilage.
10. An immunological binding partner which recognises an epitope derived from collagen type II which is comprised in the amino acid sequence HRGYPGLDG.
11. A binding partner as claimed in claim 10, which is reactive with said epitope in the context of unwound collagen type II or fragments thereof but not in the context of the wound form of collagen type II.
12. A cell line producing a monoclonal assay which is an immunological binding partner as claimed in claim 10 or claim 11.
13. A kit for performing an assay as claimed in claim 1 and comprising:  
an immunological binding partner which is immunoreactive with an epitope comprised in the amino acid sequence HRGYPGLDG; and  
means for detecting immunoreaction between said immunological binding partner and a sample.

14. A kit as claimed in claim 13, wherein said immunological binding partner bears a detectable label or is immobilised to a solid material.
- 5 15. A kit as claimed in claim 13 or claim 14, wherein said kit comprises a peptide which comprises said epitope and competes with collagen type II or fragments thereof for binding to said immunological binding partner.
- 10 16. A kit as claimed in claim 15, wherein said peptide bears a detectable label or is immobilised to a solid surface.